



BTH01006.ST25
SEQUENCE LISTING

<110> Sirbasku, Davis

<120> Compositions and Methods for Demonstrating Secretory Immune System Regulation of Steroid Hormone Responsive Cancer Cell Growth

<130> BTH0:1006

<140> 09/852,958
<141> 2001-05-10

<150> 60/203,314
<151> 2000-05-10

<150> 60/208,348
<151> 2000-05-31

<150> 60/208,111
<151> 2000-05-31

<150> 60/229,071
<151> 2000-08-30

<150> 60/231,273
<151> 2000-09-08

<160> 26

<170> PatentIn version 3.3

<210> 1
<211> 7
<212> PRT
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)..(3)
<223> Xaa can be any naturally occurring amino acid

<220>
<221> misc_feature
<222> (5)..(6)
<223> Xaa can be any naturally occurring amino acid

<400> 1

Ile Leu Xaa Tyr Xaa Xaa Leu
1 5

<210> 2
<211> 7
<212> PRT
<213> homo sapiens

<220>
<221> misc_feature
<222> (3)..(3)

<223> Xaa can be any naturally occurring amino acid

<220>

<221> misc_feature

<222> (5)..(6)

<223> Xaa can be any naturally occurring amino acid

<400> 2

Val Leu Xaa Tyr Xaa Xaa Leu
1 5

<210> 3

<211> 381

<212> PRT

<213> homo sapiens

<220>

<221> mat_peptide

<222> (1)..(381)

<400> 3

Arg His Thr Arg Gln Gly Trp Ala Leu Arg Pro Val Leu Pro Thr Gln
1 5 10 15

Ser Ala His Asp Pro Pro Ala Val His Leu Ser Asn Gly Pro Gly Gln
20 25 30

Glu Pro Ile Ala Val Met Thr Phe Asp Leu Thr Lys Ile Thr Lys Thr
35 40 45

Ser Ser Ser Phe Glu Val Arg Thr Trp Asp Pro Glu Gly Val Ile Phe
50 55 60

Tyr Gly Asp Thr Asn Pro Lys Asp Asp Trp Phe Met Leu Gly Leu Arg
65 70 75 80

Asp Gly Arg Pro Glu Ile Gln Leu His Asn His Trp Ala Gln Leu Thr
85 90 95

Val Gly Ala Gly Pro Arg Leu Asp Asp Gly Arg Trp His Gln Val Glu
100 105 110

Val Lys Met Glu Gly Asp Ser Val Leu Leu Glu Val Asp Gly Glu Glu
115 120 125

Val Leu Arg Leu Arg Gln Val Ser Gly Pro Leu Thr Ser Lys Arg His
130 135 140

Pro Ile Met Arg Ile Ala Leu Gly Gly Leu Leu Phe Pro Ala Ser Asn
145 150 155 160

BTH01006.ST25

Leu Arg Leu Pro Leu Val Pro Ala Leu Asp Gly Cys Leu Arg Arg Asp
165 170 175

Ser Trp Leu Asp Lys Gln Ala Glu Ile Ser Ala Ser Ala Pro Thr Ser
180 185 190

Leu Arg Ser Cys Asp Val Glu Ser Asn Pro Gly Ile Phe Leu Pro Pro
195 200 205

Gly Thr Gln Ala Glu Phe Asn Leu Arg Asp Ile Pro Gln Pro His Ala
210 215 220

Glu Pro Trp Ala Phe Ser Leu Asp Leu Gly Leu Lys Gln Ala Ala Gly
225 230 235 240

Ser Gly His Leu Leu Ala Leu Gly Thr Pro Glu Asn Pro Ser Trp Leu
245 250 255

Ser Leu His Leu Gln Asp Gln Lys Val Val Leu Ser Ser Gly Ser Gly
260 265 270

Pro Gly Leu Asp Leu Pro Leu Val Leu Gly Leu Pro Leu Gln Leu Lys
275 280 285

Leu Ser Met Ser Arg Val Val Leu Ser Gln Gly Ser Lys Met Lys Ala
290 295 300

Leu Ala Leu Pro Pro Leu Gly Leu Ala Pro Leu Leu Asn Leu Trp Ala
305 310 315 320

Lys Pro Gln Gly Arg Leu Phe Leu Gly Ala Leu Pro Gly Glu Asp Ser
325 330 335

Ser Thr Ser Phe Cys Leu Asn Gly Leu Trp Ala Gln Gly Gln Arg Leu
340 345 350

Asp Val Asp Gln Ala Leu Asn Arg Ser His Glu Ile Trp Thr His Ser
355 360 365

Cys Pro Gln Ser Pro Gly Asn Gly Thr Asp Ala Ser His
370 375 380

<210> 4
<211> 367
<212> PRT
<213> Oryctolagus cuniculus

<400> 4

Thr Gln Arg Ala Gln Asp Ser Pro Ala Val His Leu Ile Asn Gly Leu
 1 5 10 15

Gly Gln Glu Pro Ile Gln Val Leu Thr Phe Asp Leu Thr Arg Leu Val
 20 25 30

Lys Ala Ser Ser Ser Phe Glu Leu Arg Thr Trp Asp Ser Glu Gly Val
 35 40 45

Ile Phe Tyr Gly Asp Thr Ser Pro Lys Asp Asp Trp Phe Met Leu Gly
 50 55 60

Leu Arg Asp Gly Arg Pro Glu Ile Gln Met His Asn Pro Trp Ala Gln
 65 70 75 80

Leu Thr Val Gly Ala Gly Pro Arg Leu Asp Asp Gly Ser Trp His Gln
 85 90 95

Val His Val Lys Ile Arg Gly Asp Ser Val Leu Leu Glu Val Asp Gly
 100 105 110

Lys Glu Val Leu Arg Leu Ser Gln Val Ser Gly Thr Leu His Asp Lys
 115 120 125

Pro Gln Pro Val Met Lys Leu Ala Val Gly Gly Leu Leu Phe Pro Pro
 130 135 140

Ser Ser Leu Arg Leu Pro Leu Val Pro Ala Leu Asp Gly Cys Leu Arg
 145 150 155 160

Arg Gly Ser Trp Leu Asp Pro Gln Ala Gln Ile Ser Ala Ser Ala His
 165 170 175

Ala Ser Arg Arg Ser Cys Asp Val Glu Leu Gln Pro Gly Ile Phe Phe
 180 185 190

Pro Pro Gly Thr His Ala Glu Phe Ser Leu Gln Asp Ile Pro Gln Pro
 195 200 205

Gln Thr Glu Pro Trp Ala Phe Ser Leu Asp Leu Glu Leu Lys Pro Ser
 210 215 220

Glu Gly Ser Gly Arg Leu Leu Ala Leu Gly Thr Pro Glu Asp Pro Asn
 225 230 235 240

Trp Leu Ser Leu His Leu Gln Asp Gln Lys Val Val Leu Ser Ser Gly
 Page 4

Met Glu Pro Gly Leu Asp Leu Pro Leu Ala Trp Gly Leu Pro Leu Gln
260 265 270

Leu Lys Leu Gly Val Ser Thr Ala Val Leu Ser Gln Gly Ser Lys Lys
275 280 285

Gln Ala Leu Gly Leu Pro Pro Ser Gly Leu Gly Pro Leu Leu Asn Leu
290 295 300

Trp Ala Gln Pro Gln Gly Arg Leu Phe Leu Gly Ala Leu Pro Gly Glu
305 310 315 320

Asp Ser Ser Ala Ser Phe Cys Leu Asp Gly Leu Trp Ala Gln Gly Gln
325 330 335

Lys Leu Asp Met Asp Lys Ala Leu Asn Arg Ser Gln Asp Ile Trp Thr
340 345 350

His Ser Cys Pro Ser Ser Pro Gly Asn Gly Thr Asp Thr Ser His
355 360 365

<210> 5
<211> 373
<212> PRT
<213> Rattus norvegicus
<400> 5

Leu Arg His Ile Asp Pro Ile Gln Ser Ala Gln Asp Ser Pro Ala Lys
1 5 10 15

Tyr Leu Ser Asn Gly Pro Gly Gln Glu Pro Val Thr Val Leu Thr Ile
20 25 30

Asp Leu Thr Lys Ile Ser Lys Pro Ser Ser Ser Phe Glu Phe Arg Thr
35 40 45

Trp Asp Pro Glu Gly Val Ile Phe Tyr Gly Asp Thr Asn Thr Glu Asp
50 55 60

Asp Trp Phe Met Leu Gly Leu Arg Asp Gly Gln Leu Glu Ile Gln Leu
65 70 75 80

His Asn Leu Trp Ala Arg Leu Thr Val Gly Phe Gly Pro Arg Leu Asn
85 90 95

Asp Gly Arg Trp His Pro Val Glu Leu Lys Met Asn Gly Asp Ser Leu
Page 5

100								105						110	
Leu	Leu	Trp	Val	Asp	Gly	Lys	Glu	Met	Leu	Cys	Leu	Arg	Gln	Val	Ser
		115					120					125			
Ala	Ser	Leu	Ala	Asp	His	Pro	Gln	Leu	Ser	Met	Arg	Ile	Ala	Leu	Gly
	130					135					140				
Gly	Leu	Leu	Leu	Pro	Thr	Ser	Lys	Leu	Arg	Phe	Pro	Leu	Val	Pro	Ala
145					150					155					160
Leu	Asp	Gly	Cys	Ile	Arg	Arg	Asp	Ile	Trp	Leu	Gly	His	Gln	Ala	Gln
				165					170					175	
Leu	Ser	Thr	Ser	Ala	Arg	Thr	Ser	Leu	Gly	Asn	Cys	Asp	Val	Asp	Leu
			180					185					190		
Gln	Pro	Gly	Leu	Phe	Phe	Pro	Pro	Gly	Thr	His	Ala	Glu	Phe	Ser	Leu
		195					200					205			
Gln	Asp	Ile	Pro	Gln	Pro	His	Thr	Asp	Pro	Trp	Thr	Phe	Ser	Leu	Glu
	210					215					220				
Leu	Gly	Phe	Lys	Leu	Val	Asp	Gly	Ala	Gly	Arg	Leu	Leu	Thr	Leu	Gly
225					230					235					240
Thr	Gly	Thr	Asn	Ser	Ser	Trp	Leu	Thr	Leu	His	Leu	Gln	Asp	Gln	Thr
				245					250					255	
Val	Val	Leu	Ser	Ser	Glu	Ala	Glu	Pro	Lys	Leu	Ala	Leu	Pro	Leu	Ala
			260					265					270		
Val	Gly	Leu	Pro	Leu	Gln	Leu	Lys	Leu	Asp	Val	Phe	Lys	Val	Ala	Leu
		275					280					285			
Ser	Gln	Gly	Pro	Lys	Met	Glu	Val	Leu	Ser	Thr	Ser	Leu	Leu	Arg	Leu
	290					295					300				
Ala	Ser	Leu	Trp	Arg	Leu	Trp	Ser	His	Pro	Gln	Gly	His	Leu	Ser	Leu
305					310					315					320
Gly	Ala	Leu	Pro	Gly	Glu	Asp	Ser	Ser	Ala	Ser	Phe	Cys	Leu	Ser	Asp
				325					330					335	
Leu	Trp	Val	Gln	Gly	Gln	Arg	Leu	Asp	Ile	Asp	Lys	Ala	Leu	Ser	Arg
			340					345					350		

BTH01006.ST25

Ser Gln Asp Ile Trp Thr His Ser Cys Pro Gln Ser Pro Ser Asn Asp
355 360 365

Thr His Thr Ser His
370

<210> 6
<211> 353
<212> PRT
<213> Phodopus sungorus

<400> 6

Asn Gly Pro Gly Gln Glu Pro Val Ala Val Met Thr Ile Asp Leu Thr
1 5 10 15

Gln Met Ser Lys Pro Tyr Ser Ser Phe Glu Phe Arg Thr Leu Asp Pro
20 25 30

Glu Gly Val Ile Phe Tyr Gly Asp Thr Asn Thr Lys Asp Asp Trp Phe
35 40 45

Met Leu Gly Leu Arg Asp Gly Gln Leu Glu Ile Gln Met His Asn Pro
50 55 60

Trp Ala Gln Leu Thr Val Gly Phe Gly Pro Arg Leu Asn Asp Gly Arg
65 70 75 80

Trp His Gln Val Glu Leu Lys Met Ser Gly Asp Ser Leu Gln Leu Trp
85 90 95

Val Asp Gly Lys Glu Leu Leu Cys Leu Arg Gln Ile Ser Gly Thr Leu
100 105 110

Ala Asn Asn Ser Trp Pro Ser Met Arg Ile Ala Leu Gly Gly Leu Leu
115 120 125

Leu Pro Thr Ser Ser Leu Arg Phe Pro Leu Val Pro Ala Leu Asp Gly
130 135 140

Cys Leu Arg Arg Asp Thr Trp Leu Gly His Gln Val His Leu Ser Pro
145 150 155 160

Ser Ala Pro Asn Leu Gly Asn Cys Asp Val Asp Leu Gln Pro Gly Leu
165 170 175

Phe Phe Pro Gln Gly Thr His Ala Glu Phe Ser Leu Gln Asp Ile Pro
180 185 190

BTH01006.ST25

Gln Pro Arg Thr Asp Pro Trp Ser Phe Ser Leu Glu Leu Gly Leu Lys
195 200 205

Leu Val Asp Gly Ser Gly Cys Leu Leu Ala Leu Gly Thr Arg Thr Asn
210 215 220

Ser Ser Trp Leu Ser Leu His Leu Gln Asp Gln Lys Val Val Leu Ser
225 230 235 240

Ser Gly Val Glu Pro Lys Leu Val Leu Ala Leu Asp Met Gly Leu Pro
245 250 255

Leu Gln Leu Lys Leu Asp Ile Leu Lys Val Val Leu Ser Gln Gly Pro
260 265 270

Lys Thr Glu Val Leu Gly Ala Ser Ala Ser Arg Leu Ala Ala Leu Arg
275 280 285

Thr Leu Trp Ser His Pro Gln Gly Leu Leu Ser Leu Gly Ala Leu Ala
290 295 300

Gly Asp Asn Ser Ser Ala Ser Phe Cys Leu Ser Asp Leu Trp Val Gln
305 310 315 320

Gly Gln Arg Leu Asp Ile Asp Gln Ala Leu Asn Arg Ser Gln Asn Ile
325 330 335

Trp Thr His Ser Cys Pro His Ser Pro Asn Asn Val Ser His Ile Ser
340 345 350

His

<210> 7
<211> 7
<212> PRT
<213> Artificial

<220>
<223> Motif #40 of SHBG

<400> 7

Ile Pro Gly Val Ile Leu Lys
1 5

<210> 8
<211> 9
<212> PRT
<213> artificial

<220>

<223> Motif #25 of SHBG

<400> 8

Val Val Ser Val Leu Pro Ile Gln Val
 1 5

<210> 9

<211> 10

<212> PRT

<213> artificial

<220>

<223> Motif #31 of SHBG

<400> 9

Ile Glu Gly Val Ile Pro Ile Pro Ser Val
 1 5 10

<210> 10

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Motif # 22 of SHBG

<400> 10

Ser Leu Val Tyr Val Thr Asn Val Ala Lys
 1 5 10

<210> 11

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Motif # 26 of SHBG

<400> 11

Val Val Val Ile Leu Ala Ile Val Pro Lys
 1 5 10

<210> 12

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Motif # 34 of SHBG

<400> 12

Ser Val Pro Gly Leu Val Ser Pro Ser Gln
 1 5 10

<210> 13
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 37 of SHBG

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa can be any naturally occurring amino acid

<400> 13

Ala Thr Val Val Xaa Leu Ile Ser Asp Phe
 1 5 10

<210> 14
 <211> 7
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 20 of SHBG

<400> 14

Val Gln Leu Ser Pro Ser Glu
 1 5

<210> 15
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 10 of SHBG

<400> 15

Val Ala Gln Phe Leu Ser Thr Tyr Val Ile Thr
 1 5 10

<210> 16
 <211> 9
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 34.1 of SHBG

<400> 16

Ser Val Pro Gly Leu Val Ser Pro Ser
 1 5

<210> 17
 <211> 12
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 41 of SHBG

<400> 17

Val Phe Ala Leu Ala Pro Ile Pro Gly Val Leu Lys
 1 5 10

<210> 18
 <211> 10
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 26.1 of SHBG

<400> 18

Val Val Val Ile Leu Ala Ile Val Pro Lys
 1 5 10

<210> 19
 <211> 6
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 9 of SHBG

<400> 19

Leu Ala Val Gln Val Arg
 1 5

<210> 20
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Motif # 37.2 of SHBG

<400> 20

Gly Pro Phe Val Thr Pro Val Thr Val Thr Lys
 1 5 10

<210> 21
 <211> 9
 <212> PRT
 <213> Artificial

<220>

<223> Motif # 9.1 of SHBG

<220>

<221> misc_feature

<222> (5)..(5)

<223> Xaa can be any naturally occurring amino acid

<400> 21

Ile Glu Gln Tyr Xaa Ser Thr Phe Lys
1 5

<210> 22

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Motif # 29 of SHBG

<220>

<221> misc_feature

<222> (6)..(6)

<223> Xaa can be any naturally occurring amino acid

<400> 22

Ile Phe Tyr Pro Ile Xaa Ile Tyr Thr Gln
1 5 10

<210> 23

<211> 16

<212> PRT

<213> Artificial

<220>

<223> Motif # 21 of SHBG

<400> 23

Glu Val Gln Leu Val Glu Ile Gly Gly Gly Leu Val Gln Pro Gly Arg
1 5 10 15

<210> 24

<211> 9

<212> PRT

<213> Artificial

<220>

<223> Motif # 18 of SHBG

<400> 24

Val Val Ser Gly Leu Phe Pro Val Pro
1 5

<210> 25

BTH01006.ST25

<211> 8
<212> PRT
<213> Artificial

<220>
<223> Motif of SHBG

<400> 25

Ile Ser Gly Ala Phe Ile Ala Phe
1 5

<210> 26
<211> 17
<212> PRT
<213> Artificial

<220>
<223> Motif # 18 of SHBG

<400> 26

Val Val Ser Gly Leu Phe Val Pro Pro Ile Ser Gly Ala Phe Ile Ala
1 5 10 15

Phe